

AERONAUTICAL CHARTING FORUM
Instrument Procedures Group
Meeting 04-01 – April 26-27, 2004
History Record

FAA Control # 04-01-255

Subject: Rounding of HATs for LPV and RNP (SAAAR) Approaches.

Background/Discussion: FAA Orders 8260.50/51 promulgated TERPS criteria for the LPV and RNP approaches. The order requires rounding of Decision Altitudes (DAs) upwards to the next 20 ft increment for RNP and 10 ft increment for LPV. It is our understanding that the rounding was done in conjunction with harmonization efforts with ICAO. The rounding of DAs for RNP and LPV has a very significant effect on the attainable approach minima for LPV. Current estimates are that about 1/3 of RNP (SAAAR) and LPV approaches that would have attained a minima of ¾ mile (without lights) will be required to have a minima of 1 mile due to rounding. See the attached briefing slides for further background and discussion.

Recommendations: The FAA should either:

- a) Not round HATs for RNP (SAAAR) and LPV approaches, or
- b) Waiver the small increase in visibility resulted from rounding that results in a visibility increase from ¾ to 1 mile solely due to rounding.

Additionally, the FAA should round all vertically-guided instrument approaches consistently; e.g., no rounding, 10 ft, 20 ft, etc.

See the attached briefing for additional information.

Comments: This recommendation affects Orders 8260.3B, 8260.50 and 8260.51

Submitted by: S.V. Massimini DSc

Organization: The MITRE Corporation, 7515 Colshire Dr., McLean, VA 22102

Phone: 703 883 5893

FAX: 703 883 1364

E-mail: svm@mitre.org

Date: 9 April 2004

Initial Discussion – Meeting 04-01: New issue presented by Vince Massimini, MITRE. Vince's presentation pointed out that the non-precision rounding process (upper 20' increment) for LNAV/VNAV and RNP unnecessarily penalizes visibility minima. His recommendation is that HAT values should not be rounded for any vertically guided approach. Alternatively, if a rounding process is used make the value uniform. A copy of Vince's briefing slides is included with the minutes as attachment 5. Tom Schneider, AFS-420, agreed to take the issue to AFS-420 for study. **ACTION: AFS-420.**

MEETING 04-02: Tom Schneider, AFS-420, briefed that the issue was studied and the revised RNAV and RNP criteria will round DA values to the next higher foot value, consistent with ILS. Randy Kenagy, AOPA, stated that FAA has committed to publishing 150 new LPV IAPs this year, to be followed by 300 next year. He asked if the revised rounding policy could be accelerated. Tom took the IOU to check on this. **ACTION: AFS-420.**

MEETING 05-01: Tom Schneider, AFS-420, briefed the following update from Jack Corman, AFS-420: A policy guidance memo was issued to AVN-100 on January 26, 2005 directing that rounding of all vertically guided DA values be accomplished the same as ILS is rounded (1-foot increment). The memo may be viewed at the AFS-420 policy memo page at the following web site address: <http://av-info.faa.gov/terps/Policy%20Memo%20Page.htm>. On a side note, Mark Ingram, ALPA, asked the status of LPV procedure development. Randy Kenagy, AOPA, stated that the process was going well. Brad Rush, NFPO, stated that OMB goal is 150-280 procedures this year and 300 procedures per year in the future. **Issue Closed.**
